Information

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Improved Quality of Life Following a Kock Continent Ileostomy

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THE TIME-HONORED TEACHING of physicians has been "to treat the patient and not just the disease" by taking into account emotional as well as physical problems. A new *holistic* school of medicine would expand this traditional role of physicians to include areas usually the domain of cultural anthropologists, ecologists, economists, sociologists and the clergy. Although their approach may differ, both the old and new medical philosophies share the common goal of not only getting patients well, but of improving the quality of their lives.

The development of the continent ileostomy over the past decade by Nils Kock of Sweden is a magnificent example of achieving this goal. Rarely has a surgical breakthrough resulted in so dramatic an improvement in patients' life-styles.

There was plenty of room for improvement. For despite the important advances of Brooke[1] and Turnbull[2] in surgical technique, and the greater efficiency of the newer external appliances, a conventional ileostomy is far from ideal. Local skin irritation due to leakage or allergy to the adhesives is common, and in some 10 percent of patients who have had ileostomies another operation is necessary because of prolapse, retraction, stenosis or peristomal hernia.[3] The concern of this paper, however, is not with the local complications of a conventional ileostomy, but with the appreciable number of unhappy patients who are psychologically, socially or sexually maladjusted due to the constant wearing of a bag filled with liquid intestinal contents.

The Kock continent ileostomy resolves almost all of these problems by eliminating both a protruding stoma and an external appliance.[4] This operation creates an internal reservoir for storage and a nipple valve to maintain continence (Figure 1). The reservoir is quickly and easily emptied two or three times a day by means of a catheter.

The operation has been slow to gain acceptance because of numerous complications during its evolutionary period.[5-7] The most disconcerting of these has been slippage of the nipple valve with a resultant loss of continence. Leakage under these circumstances is particularly distressing because the continent ileostomy stoma is flush with the skin and placed low on the abdomen. Nipple valve problems have been largely resolved, however, by a series of innovative changes in operative technique,[4,8,9] and continence is now almost always assured.

From October 1977 to October 1979, continent ileostomies were constructed in 29 patients with no mortality and minimum morbidity. The patients ranged in age from 17 to 66, with a median of 34 years. The original diseases necessitating a proctocolectomy and ileostomy in these patients were ulcerative colitis in 25, multiple polyposis in 2 and necrotizing amebiasis in 2. Of these operations, 22 were conversions of conventional ileostomies, either because of stomal problems or for psychological reasons. The remainder were combined with proctocolectomy.

There were no major postoperative complications. In two patients minor wound infections developed, and in one a pelvic abscess occurred. The pelvic abscess, in a patient receiving high-dose steroids while undergoing proctocolectomy, drained spontaneously through the perineal wound. Gastrointestinal decompression was not used routinely following operation.

Late complications arising 3 to 12 months following the procedure, required reoperation in five patients. Two pinpoint fistulas due to silk sutures were easily closed, one without entering the peritoneal cavity. A third fistula, in a patient who probably has Crohn disease* but who mistakenly was operated on after a diagnosis of ulcerative colitis, has recurred after surgical closure. A second operation was necessary in one patient who had occasional incontinence because of slippage of the nipple valve. Finally, a minor operation to correct a recurrent everting nipple valve,

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*The WESTERN JOURNAL's style regarding eponyms is that they are not written in the possessive form; therefore Graves disease, Ewing sarcoma and Paget disease. An explanation may be found on page 78 of the July 1978 issue.

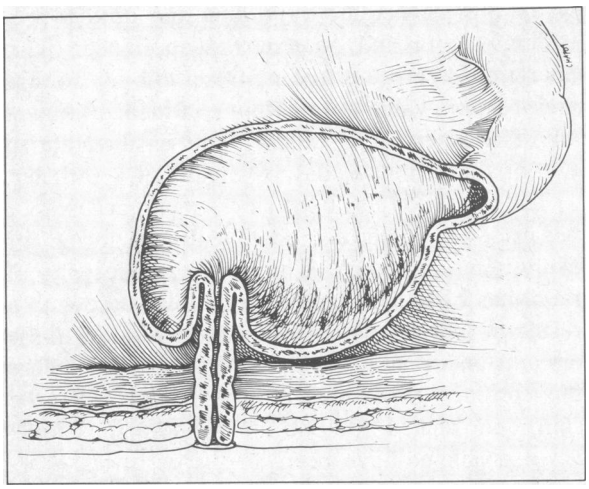

Figure 1.—Drawing of a Kock reservoir ileostomy with nipple valve.

reducible by the patient, was only partially successful.

The overall results have been excellent: no patient has required the wearing of a bag following the initial operation. Moreover, the late complications listed above should pose less of a problem in the future because of modifications in the operative technique.

Chronic ulcerative colitis is a disabling disease for which medical treatment is only supportive as the cause is unknown. Patients may have 15 to 20 bloody, diarrheal stools per day, leading to obvious changes in their life-style. Anemia and weakness are common, and fulminating acute attacks may be life-threatening. In long-standing cases, there is an increased risk of carcinoma of the colon. The only definite cure is proctocolectomy, but, in the past, procrastination has been the rule because patients have been understandably loath to wear an external bag filled with intestinal discharge for the rest of their lives.

For these patients the Kock ileostomy offers an attractive alternative to the chronic disability, so that an aggressive surgical approach holds definite advantages over the conservative management of the past. No longer does an ileostomy need to be considered a last-resort or emergency operation, and earlier surgical intervention is certain to lower the mortality and morbidity of proctocolectomy.

A continent ileostomy is also frequently indicated in a second category of patients: those who have had a proctocolectomy and conventional ileostomy but who are having stomal complications or who are unable to adjust psychologically to an external appliance. For these patients, revision to a continent ileostomy is a most gratifying procedure.

A continent ileostomy can also be carried out for other uncommon diseases requiring proctocolectomy, but the Kock procedure is usually contraindicated in Crohn disease because of the high recurrence rate in the small intestine.[4]

The 22 patients in this series whose conventional ileostomies were converted to continent ileostomies were closely questioned regarding changes in their life-style. Each of them has noted a significant and often dramatic change for the better in the quality of his or her life. Skin problems and odor have been eliminated; time spent in care of the ileostomy has been considerably shortened; clothing is worn more comfortably; confidence has increased during athletic endeavors and on social occasions, and sexual relations have improved considerably.

Finally, the monetary savings to a patient with a continent ileostomy is substantial. In contrast to a patient with a conventional ileostomy whose outlay is $500 to $800 a year for external appliances, a patient with a continent ileostomy spends only $5 for a new catheter every six months.

Summary

A conventional ileostomy is no longer the last-resort, unsatisfactory operation of the past because of advances in surgical techniques and in preoperative and postoperative care, as well as improvements in modern external appliances. A continent ileostomy, however, substitutes an unobtrusive gauze pad for a bag filled with liquid intestinal contents. The advantages are obvious. There are few operations that contribute so dramatically to an improved quality of life as a Kock continent ileostomy.

REFERENCES

1. Brooke BN: The management of an ileostomy including its complications. Lancet 2:102-104, Jul 19, 1952

2. Turnbull RB Jr: Management of ileostomy. Am J Surg 86: 617-624, Nov 1953

3. Roy PH, Sauer WC, Beahrs OH, et al: Experience with ileostomies—Evaluation of long-term rehabilitation in 497 patients. Am J Surg 119:77-85, Jan 1970

4. Kock NG, Darle N, Hulten L, et al: Ileostomy. Curr Probl Surg 14:18-49, Aug 1977

5. Goldman SL, Rombeau JL: The continent ileostomy: A collective review. Dis Colon Rectum 21:594-599, Nov 1978

6. Halvarson JF, Heimann P, Hoel R, et al: The continent reservoir ileostomy: Review of a collective series of thirty-six patients from three surgical departments. Surgery 83:252-285, Mar 1978

7. Schrock TR: Complications of continent ileostomy Am J Surg 138:162-169, Jul 1979

8. Steichen FM: The creation of autologous substitute organs with stapling instruments. Am J Surg 134:659-673, Nov 1977

9. Gellernt IM, Bauer JJ, Krul I: The reservoir ileostomy. Surg 185:179-184, Feb 1977